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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

GREENE, IVAN A

ART UNIT

PAPER NUMBER

1619

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/540,041	Applicant(s) YOSHIDA ET AL.	
	Examiner IVAN GREENE	Art Unit 1619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/07/2006 and 08/10/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of the claims

Claims 1-9 are currently pending and are presented for examination on the merits.

Information Disclosure Statement

The information disclosure statement(s) submitted on 04/07/2006 and 08/10/2006 were filed before the mailing date of the first office action on the merits. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the Examiner.

Priority

The U.S. effective filing date has been determined to be 12/26/2003, the filing date of the document PCT/JP03/16953. The foreign priority date has been determined to be 12/26/2002, the filing date of document JP 2002-376841.

Objections

1. The instant specification is objected to because the abstract recites incomprehensible English phrases indicated as follows by underlines:

This object of the invention is to provide an oil-in water emulsion cosmetic composition having fine sense of use and excellent dispersion stability, and does not occur twisting upon drying.

In advance, a hydrophobicized powder is dispersed in an oil phase and processed with wet type disperser such as beads mill, dispersing solution is obtained. And then said dispersing solution and a water phase are processed with homomixer, an oil-in water emulsion composition having excellent sense of use and dispersibility of powder after applying to skin can be obtained. The dispersing stability of powder is extremely good by using a particular dispersant and a particular oil component. The dispersion stability of powder is further improved, and the precipitation and creaming of the emulsion particle can be solved by blending thickener having salt tolerance.

Sticky feeling is solved by using succinoglycan as a thickener, and twisting is solved by plasticizing said succinoglycan.

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Specifically the underlined phrases are grammatically awkward and words "twisting" and "homomixer" appear to be mistranslated. Appropriate correction is required.

2. The abstract of the disclosure is further objected to because it is more than one paragraph. See 37 CFR 1.72(b) and MPEP § 608.01(b) which states: The abstract should be in narrative form and generally limited to a single paragraph within the range of 50 to 150 words [emphasis added].

3. Claim 2 is objected to because the claim recites --and wherein polyoxyalkylene modified polysiloxane and/or isostearic acid are contained as dispersant of said hydrophobicized powder.-- The claim language is awkward and difficult to read in the context of the claim. The examiner suggests the language "and further comprising a polyoxyalkylene modified polysiloxane and/or an isostearic acid, which are dispersants of said hydrophobicized powder." or similar language. Appropriate correction is required.

4. Claim 3 is objected to because the claim recites --wherein condensed 12-hydroxystearic acid-added polyethylene glycol and/or condensed 12-hydroxystearic acid-added polyglycerol are contained as dispersant of said hydrophobicized powder. Similarly to claim 2, the language is awkward and difficult to read in the context of the claim. Appropriate correction is required.

5. Claim 5 is objected to because the claim recites --wherein comprising succinoglycan--. Similarly to claims 2 and 3, the language is awkward and difficult to read in the context of the claim. Appropriate correction is required.

Rejections

Claim Rejections - 35 U.S.C. 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. **Claims 2, 3, 5 and 6 is/are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**
2. Claim 2 recites the limitation "the [...] silicone oil" in line 2. There is insufficient antecedent basis for this limitation in the claim.
3. Claim 3 recites the limitation "the [...] polar oil" in line 2. There is insufficient antecedent basis for this limitation in the claim.
4. Claim 3 is further rejected because the claim recites "polar oil." In the chemical arts "oils" are conventionally known as non-polar substances. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "polar oil" in claim 3 is used by the claim to mean "an oil", while the accepted meaning is "a non-polar oil." The term is indefinite because the specification does not clearly redefine the term.

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5. Claim 5 recites the limitation "comprising succinoglycan" and "plasticizers" in line two. There is insufficient antecedent basis for these limitations in the claim.

6. Claim 5 is further rejected as being indefinite because the claim uses comprising language in conjunction with a Markush group (See MPEP § 2173.05(h)). Claim 6 is rejected as depending from and doing nothing to correct the shortcomings of the parent claim.

Claim Rejections - 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 2, 4, 8 and 9 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by BRIEVA (US 5,066,485).

Disclosure of the Prior Art

BRIEVA discloses compositions comprising oil-in-water emulsions further comprising pigment [particles] coated with polysiloxane; a silicone phase; a water phase and a polydiorganosiloxane-polyalkylene copolymeric surfactant (abstract). BRIEVA further discloses the coated pigment consists essentially of finely divided particles of pigment whose surfaces are chemically bonded to, and physically completely coated by, polysiloxane which coating renders the particles hydrophobic (1:19-24). BRIEVA further discloses suitable pigments included titanium dioxide and zinc oxide, inter alia (3:20-24). BRIEVA further discloses the pigment can be coated by placing it in a dry, finely

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divided form in a mixer and adding a silicone material [such as] $A_1SiX_1X_2X_3$, wherein (A) is an alkyl or alkenyl group having 1 to 30 carbon atoms, and X_1 , X_2 , and X_3 are independently chloro, methoxy, or ethoxy (3:30-37).

BRIEVA further discloses the examples in which the indicated ingredients were combined into an "oil phase" mixture and a "water phase" mixture; the two mixtures were then thoroughly mixed to produce a cosmetic product which was an oil-in-water emulsion having superior applicability, and non-dragging, non-streaking and non-setting properties (7:30-40). BRIEVA further discloses Example 4 as follows (8:30-50):

EXAMPLE 4

Component	Amount (% by weight)
<u>Oil Phase</u>	
Dimethicone (10 cs)	10.0
Cyclomethicone (D = 4)	5.0
Mineral oil	10.0
<u>Pigment*</u>	
Black, Yellow and Red Iron Oxides	4.0
TiO ₂	16.0
Talc	5.0
<u>Water phase</u>	
Surfactant (Dow Corning 193 fluid, HLB = 13.6)	5.0
Water	39.5
Ethanol	5.0
Xanthan gum	0.5

*Pigment was coated with polymethylhydrogen siloxane bonded to the pigment surface and mineral oil.

Which comprises the silicone oils dimethicone and cyclomethicone at greater than 50% weight of the oil phase (instant claim 2); xanthan gum (instant claim 4).

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Regarding the limitation "hydrophobicized powder is an ultraviolet rays scattering agent." It is clear that the limitation is met because the pigment particles are titanium dioxide (instant claim 9).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

- 1. Claims 3, and 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over BRIEVA (US 5,066,485) in view of GERS-BARLAG (US 2002/0054890) and KNIPPER (US 5,514,792).**
- 2. Claims 8 and 9 are rejected as being obvious in embodiment wherein the hydrophobicized powder is zinc oxide.**

Applicants Claims

Applicant claims an oil-in-water emulsion comprising a water phase, an oil phase which is dispersed in said water phase, and a hydrophobicized powder which is dispersed in said oil phase. Applicant further claims the oil-in-water emulsion further comprising a condensed 12-hydroxysteric acid-added polyethylene glycol and/or a condensed 12-hydroxystearic acid-added polyglycerol as dispersants of the hydrophobicized powder. Applicant further claims the oil-in-water emulsion further comprising a succinoglycan and a plasticizer selected from glycerin, polyoxyethylene methyl glucoside, and polyethylene glycol 20,000. Applicant further claims the oil-in-water emulsion further comprising one or more co-emulsifiers selected from carboxymethyl cellulose, hydroxyethyl cellulose, hydroxymethyl cellulose and gelatin.

Determination of the scope

and content of the prior art (MPEP 2141.01)

In addition to the disclosure of BRIEVA discussed above, BRIEVA teaches thickeners are useful for their oil-in-water emulsion, and specifically sodium

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carboxymethyl cellulose and/or hydroxyethyl cellulose, can be used (7:3-15). BRIEVA further teaches zinc oxide as a suitable pigment particle (3:20-24).

**Ascertainment of the difference between
the prior art and the claims (MPEP 2141.02)**

The difference between the rejected claims and the teachings of BRIEVA is that BRIEVA does not expressly teach 12-hydroxystearic acid added polyglycerol or succinoglycan. The deficiency in the 12-hydroxystearic acid-added polyglycerol is cured by the teachings of GERS-BARLAG. And the deficiency in the succinoglycan is cured by the teachings of KNIPPER.

GERS-BARLAG teaches pickering emulsions, which are finely disperse systems of the water-in-oil or oil-in-water type (abstract), preferably as cosmetic or dermatological preparations ([0001]). GERS-BARLAG further teaches glyceryl tri(12-hydroxystearate) as a wax ester thickener ([0049], [0071]).

KNIPPER teaches chemically modified succinoglycan polysaccharides [...] are well suited [...] for use as thickening, stabilizing or suspending agents in [...] cosmetics (abstract).

**Finding of prima facie obviousness
Rationale and Motivation (MPEP 2142-2143)**

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the claimed invention was made to combine GERS-BARLAG and KNIPPER with

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BRIEVA and produce the instantly claimed invention because GERS-BARLAG and BRIEVA both teach similar water-in-oil cosmetic emulsions; and KNIPPER teaches a succinoglycan useful as a cosmetic thickener which thickeners are taught by both BRIEVA and GERS-BARLAG as useful in their oil-in-water cosmetic emulsions. One of ordinary skill in the art would have been motivated to combine GERS-BARLAG and KNIPPER with BRIEVA because the improved cosmetic oil-in-water emulsion would have been sought after, and thus valuable for the inventor.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Consideration of Experimental Results:

The results provided in the specification have been considered and are not considered unexpected results because no side-by-side results comparing prior art examples to the inventive samples have been demonstrated.

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

Conclusion

Claims 1-9 are pending and have been presented for examination on the merits. The instant specification is objected; claims 2, 3 and 5 are objected; claims 1, 2, 4, 8

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and 9 are rejected under 35 U.S.C. 102(b); and claims 3, and 5-9 are rejected under 35 U.S.C. 103(a). No claims allowed at this time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IVAN GREENE whose telephone number is (571)270-5868. The examiner can normally be reached on Monday through Thursday 7AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

IVAN GREENE
Examiner, Art Unit 1619

/Ernst V Arnold/
Primary Examiner, Art Unit 1616